

Appl. No. 10/727,790  
Examiner: IVEY, ELIZABETH D, Art Unit 1775  
In response to the Office Action dated July 12, 2005

Date: October 12, 2005  
Attorney Docket No. 10113391

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims

Claim 1 (currently amended): A multi-layer hard mask structure, comprising:

a first hard mask layer composed of a first boro-silicate glass layer and an overlying first undoped silicon glass layer; and

at least one second hard mask layer disposed on the first hard mask layer, which is composed of a second boro-silicate glass and an overlying second undoped silicon glass layer, wherein a doping concentration of the first boro-silicate glass layer is higher than that of the second boro-silicate glass layer.

Claims 2-3 (canceled)

Claim 4 (currently amended): The hard mask structure as claimed in claim [[2]] 1, wherein the first boro-silicate glass layer has a thickness of about 0.3 $\mu$ m.

Claim 5 (original): The hard mask structure as claimed in claim 1, wherein the first undoped silicon glass layer has a thickness of about 100 to 400Å.

Claim 6 (original): The hard mask structure as claimed in claim 1, wherein the second undoped silicon glass layer has a thickness of about 100 to 400Å.

Claim 7 (canceled)

Claim 8 (currently amended): The hard mask structure as claimed in claim [[7]] 1, wherein the doping concentration of the first boro-silicate glass layer is about  $4 \times 10^{17}$  to  $8 \times 10^{17}$  atom/cm<sup>2</sup>.

Claim 9 (currently amended): The hard mask structure as claimed in claim [[7]] 1, wherein the doping concentration of the second boro-silicate glass layer is about  $1 \times 10^{17}$  to  $5 \times 10^{17}$  atom/cm<sup>2</sup>

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Claims 10-23 (canceled)